

WHAT IS CLAIMED IS:

1. A method for reducing neuronal degeneration caused by the neurodegenerative effects of disease, or for reducing secondary neuronal degeneration that follows the primary neuronal damage of an injury, in the central or peripheral nervous system of an individual in need thereof, comprising:

causing T cells activated against a nervous system (NS)-specific antigen which, in its native state, is present at the site of neuronal degeneration, to accumulate at the site of neuronal degeneration in the individual in need, thereby reducing neuronal degeneration at that site, wherein, when the individual in need has an autoimmune disease, the NS-specific antigen is not the autoimmune antigen of that disease, and when the individual in need has a neoplasm, the NS-specific antigen is one that does not appear in the neoplasm.

2. A method in accordance with claim 1, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of said NS-specific antigen, or an immunogenic or cryptic epitope thereof, in such a manner as to cause a T cell response thereto, such that T cells become activated against the NS-

specific antigen which is present at the site of neuronal degeneration.

3. A method in accordance with claim 1, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of T cells that are activated against said NS-specific antigen.

4. A method in accordance with claim 3, wherein said T cells are autologous.

5. A method in accordance with claim 1, wherein the individual in need is one suffering from an injury that has caused primary neuronal damage.

6. A method in accordance with claim 5, wherein said injury is selected from the group consisting of blunt trauma, penetrating trauma, hemorrhagic stroke, ischemic stroke, and damages caused by surgery.

7. A method in accordance with claim 1, wherein the individual in need is one suffering from a disease that has neurodegenerative effects.

8. A method in accordance with claim 5, wherein said disease is selected from the group consisting of diabetic neuropathy, senile dementia, Alzheimer's disease, Parkinson's Disease, facial nerve (Bell's) palsy, glaucoma, Huntington's

chorea, amyotrophic lateral sclerosis, non-arteritic optic neuropathy, and vitamin deficiency.

9. A method for ameliorating the effects of an injury or disease that causes neuronal degeneration of the central or peripheral nervous system of an individual in need thereof, comprising:

causing T cells activated against a nervous system (NS)-specific antigen which, in its native state, is present at the site of neuronal degeneration, to accumulate at the site of neuronal degeneration in the individual in need, thereby ameliorating the effects of the injury or disease at that site, wherein, when the individual in need has an autoimmune disease, the NS-specific antigen is not the autoimmune antigen of that disease, and when the individual in need has a neoplasm, the NS-specific antigen is one that does not appear in the neoplasm.

10. (New) A method in accordance with claim 9, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of said NS-specific antigen, or an immunogenic or cryptic epitope thereof, in such a manner as to cause a T cell response thereto, such that T cells become activated against

the NS-specific antigen which is present at the site of neuronal degeneration.

11. A method in accordance with claim 9, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of T cells that are activated against said NS-specific antigen.

12. A method in accordance with claim 11, wherein said T cells are autologous.

13. A method in accordance with claim 9, wherein the individual in need is one suffering from an injury that has caused primary neuronal damage.

14. A method in accordance with claim 13, wherein said injury is selected from the group consisting of blunt trauma, penetrating trauma, hemorrhagic stroke, ischemic stroke, and damages caused by surgery.

15. A method in accordance with claim 9, wherein the individual in need is one suffering from a disease that has neurodegenerative effects.

16. A method in accordance with claim 13, wherein said disease is selected from the group consisting of diabetic neuropathy, senile dementia, Alzheimer's disease, Parkinson's Disease, facial nerve (Bell's) palsy, glaucoma, Huntington's

Huntington's chorea, amyotrophic lateral sclerosis, non-arteritic optic neuropathy, and vitamin deficiency.